



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/240,632	02/01/1999	YUTAKA MURAKAMI	402/568	7584

7590

12/17/2004

MORRIS LISS  
POLLOCK, VANDE SANDE & AMERNICK  
P. O. BOX 19088  
WASHINGTON, DC 200363425

EXAMINER
----------

FAN, CHIEH M

ART UNIT	PAPER NUMBER
----------	--------------

2634

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/240,632

Applicant(s)

MURAKAMI ET AL.

Examiner

Chieh M Fan

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-13,33,37-40,42-44,46-49,51,53-55 and 57-73 is/are pending in the application.
- 4a) Of the above claim(s) 60-73 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-13,33 and 37 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 38-40,42-44,46-49,51,53-55 and 57-59 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to the Request for Continued Examination (RCE) filed 11/2/04 and the after-final amendment filed 7/2/04.
2. The applicants are reminded that non-elected claims 60-73 are still pending in the present application. The non-elected claims need to be cancelled before the application is allowed.

### ***Response to Amendment***

3. As indicated in the Advisory Action sent 9/09/2004, the amendment filed 7/2/04 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121, as amended on June 30, 2003 (see 68 *Fed. Reg.* 38611, June 30, 2003). The applicants are reminded that only the following identifiers are permitted: (original), (currently amended), (canceled), (withdrawn), (previously presented), (new) and (not entered). Therefore, the status identifier "allowed" used for claims 1, 3, 5, 7, 9, 11 and 13 is not permitted. The applicants should provide proper identifiers such as "original" or "previously presented" to the claims listed above.

***Claim Objections***

4. Claims 49, 51, 53-55 and 57-59 are objected to because the limitation "by using said second quadrature baseband signal" in lines 6-7 of claim 49 should be changed to --- by using only said second quadrature baseband signal --- so as to be consistent with the remarks on the last paragraph of page 12 of the amendment filed 07/02/2004.

Appropriate correction is required.

5. According to the specification of the present application, a reference symbol (see, for example, 12c in Fig. 2) is transmitted to acquire synchronization between the transmitter and the receiver during an initial stage of signal transmission (see page 19, lines 21-24 in the specification). Since initial synchronization generally involves adjusting the phase/frequency of the local clock in the receiver, the reference symbol is arguably used for determining frequency offset. That is, the frequency offset is, at least arguably, not determined only by the second modulation signal. Therefore, the examiner suggests deleting "at least one of" in line 7 of claim 38. Claims 38-40, 42-44 and 46-48 are objected to for the reason stated above.

***Allowable Subject Matter***

6. Claims 1, 3-13, 33, and 37 are allowed. Claims 38-40, 42-44, 46-49, 51, 53-55 and 57-59 would be allowable if rewritten or amended to overcome the claim objections, set forth in this Office action.

***Conclusion***

7. This application is in condition for allowance except for the following formal matters:

See above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

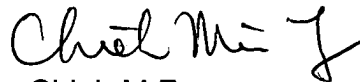
A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (571) 272-3042. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

Art Unit: 2634

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chieh M Fan  
Primary Examiner  
Art Unit 2634

December 12, 2004